

# "Harmless when used as directed" Regulating Paraquat in Britain, 1961-1977

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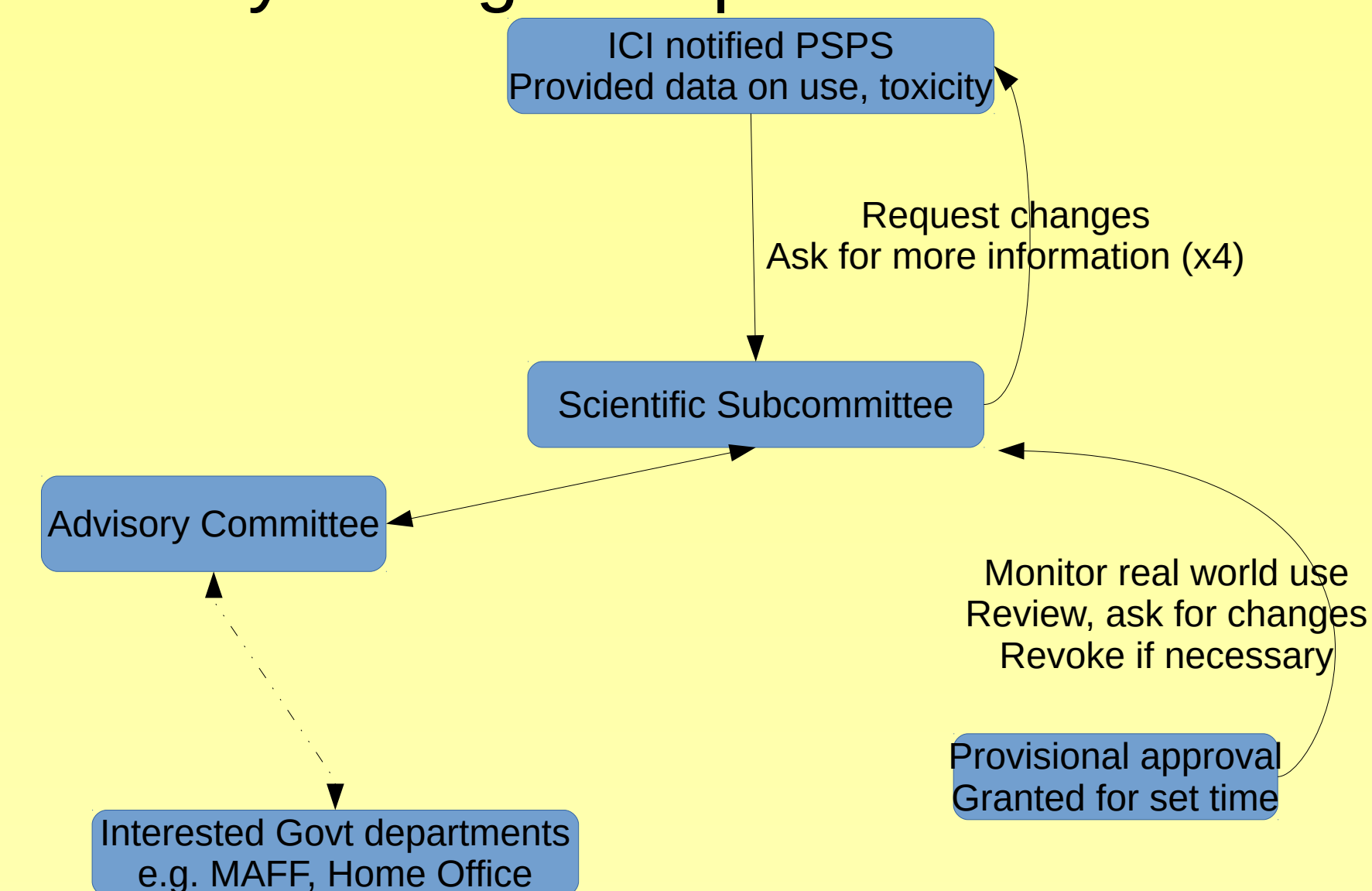
Paraquat was an herbicide developed by Imperial Chemical Industries (ICI). After provisional approval from the Pesticides Safety Precaution Scheme (PSPS) it was introduced to the British market in two different forms:

- Gramoxone (1962) - a strong, liquid concentrate only for professional use
- Weedol (1965) - a less concentrated granulated version for home gardeners

## What was the PSPS?

Initiated to improve safety of new agrochemicals following a report into a series of pesticide related deaths in farm workers.

- Flexible, fairly rapid process.
- Plenty of guidance meant that companies which put products forward for scrutiny rarely had them rejected.
- Recommendations through the PSPS could substantially change the product



## How were users involved in regulation?

Members of the expert committees stood in for users: they imagined their behaviours and reviewed user experiences. Aware that storing chemicals in drinks bottles was already a problem Gramoxone's label instructed users to never repack or decant it.

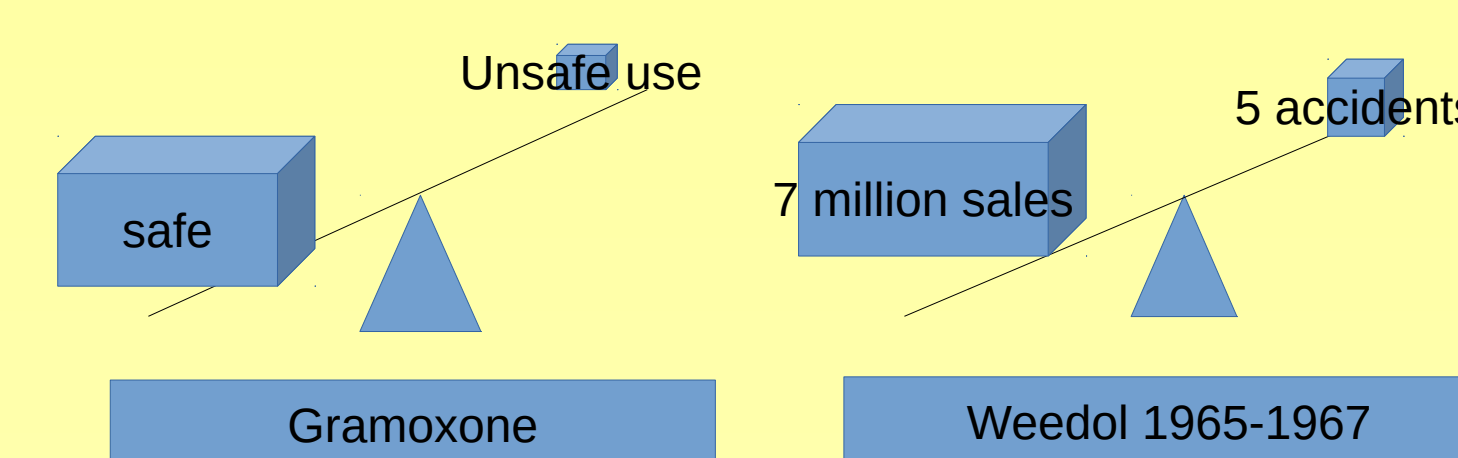
When users were accidentally poisoned paraquat was reviewed. A clear pattern emerged from their circumstances: all had mistakenly ingested Gramoxone from beverage bottles. Labelling and sales procedures were revised.

Date	Activity
1947	Paraquat's herbicidal activity discovered
1957	Pesticides Safety Precautionary Scheme established
1961	Notification of paraquat submitted to PSPS
1962	Provisional clearance for professional Gramoxone
1965	Provisional clearance for amateur Weedol
1966	First paraquat deaths recorded
1968	First mainstream reporting of paraquat deaths Gramoxone added to Poisons List
1974	Stricter rules for Gramoxone sales (Schedule 1) Stenching agent added to Gramoxone to prevent accidental ingestion
1975	Weedol changed to include diquat, a combination rejected by the expert committees in 1961
1977	Emetic added to all formulations – vomiting reduced the amount of paraquat the could be absorbed from the stomach

Representatives of professional users, the National Farmworker's Union, complained that the labelling did not adequately describe how serious the consequences of misuse were.

Families of domestic poisoning victims did not mobilise in this way.

The rising death toll from Gramoxone was highlighted by the media and there were calls for paraquat to be banned. Experts weighed up the situation.



Paraquat was too useful (and too lucrative) to ban. Instead Gramoxone was scheduled as a poison and had to carry a label.

When it was reclassified as a more dangerous poison, buyers needed

- + a householder's certificate
- anyone could get this
- + to sign the Poisons register
- people gave false addresses



Images of poisoning victims were rarely shown, unless they had happy endings.

## Roles of the press

Published press releases which announced changes to sales regulation.

Regularly pushed MAFF, Home Office and ICI for comment and improved safety on behalf of victims.

High media profile of accidental poisonings can be credited with educating and motivating people to improve their own domestic safety.

But

Caused confusion by inconsistently naming Weedol and Gramoxone, favouring the generic name paraquat.

Showed how to illicitly acquire Gramoxone. Blamed for suicides, and murderers even claimed news articles inspired them to use paraquat.

## Conclusions

Changes to Gramoxone's formula were more important in protecting users than wording on labels or regulating sales. Both vendors and users were very hard to control.

• The authority of the PSPS reassured users that their immediate physical safety was being attended to. However, recommendations made through the PSPS may have increased risks to domestic users.

• ICI originally proposed Weedol as diquat-paraquat mixture for home users in 1961, but PSPS rejected it.

• Weedol's long development time increased its costs. Some amateur gardeners found Gramoxone's lower cost, large volume and better value more appealing than safety.